

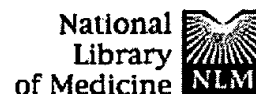
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## WEST Search History

DATE: Thursday, November 21, 2002

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>			
L12	L11 same cog	0	L12
L11	L9 same Saccharomyces	10	L11
L10	L9 same Neurospora	2	L10
L9	L8 same haploid	72	L9
L8	L1 same (fungus or fungal or fungi or yeast)	2065	L8
L7	L3 same cog	2	L7
L6	L3 same diploid	3	L6
L5	L3 same Neurospora	2	L5
L4	L3 same haploid	2	L4
L3	L2 same (fungus or fungal or fungi or yeast)	11	L3
L2	(recombination or recombinational) hotspot	41	L2
L1	(recombination or recombinational)	45777	L1

END OF SEARCH HISTORY



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PubMed	Nucleotide	Protein	Genome	Structure	PopSet	Taxonomy	OMIM	Bo
Search PubMed	<input checked="" type="checkbox"/> for	(recombinational hotspot) AND (fungus or func				Go	Clear	
Limits		Preview/Index		History		Clipboard		Details

Display	Summary	<input checked="" type="checkbox"/> Sort	<input checked="" type="checkbox"/> Save	Text	ClipAdd	Order
Show: 20	<input checked="" type="checkbox"/>	Items 1-5 of 5				One page

Entrez PubMed

- ☐ **1:** [He Q, Cederberg H, Rannug U.](#) Related Articles, Links  
The influence of sequence divergence between alleles of the human MS205 minisatellite incorporated into the yeast genome on length-mutation rates and lethal recombination events during meiosis.  
J Mol Biol. 2002 May 31;319(2):315-27.  
PMID: 12051909 [PubMed - indexed for MEDLINE]

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- ☐ **2:** [Lobachev KS, Gordenin DA, Resnick MA.](#) Related Articles, Links  
The Mre11 complex is required for repair of hairpin-capped double-strand breaks and prevention of chromosome rearrangements.  
Cell. 2002 Jan 25;108(2):183-93.  
PMID: 11832209 [PubMed - indexed for MEDLINE]

Related Resources

- ☐ **3:** [Kobayashi T, Horiuchi T.](#) Related Articles, Links  
A yeast gene product, Fob1 protein, required for both replication fork blocking and recombinational hotspot activities.  
Genes Cells. 1996 May;1(5):465-74.  
PMID: 9078378 [PubMed - indexed for MEDLINE]

- ☐ **4:** [Horiuchi T, Nishitani H, Kobayashi T.](#) Related Articles, Links  
A new type of E. coli recombinational hotspot which requires for activity both DNA replication termination events and the Chi sequence.  
Adv Biophys. 1995;31:133-47. Review.  
PMID: 7625270 [PubMed - indexed for MEDLINE]

- ☐ **5:** [Grimm C, Bahler J, Kohli J.](#) Related Articles, Links  
M26 recombinational hotspot and physical conversion tract analysis in the ade6 gene of Schizosaccharomyces pombe.  
Genetics. 1994 Jan;136(1):41-51.  
PMID: 7908005 [PubMed - indexed for MEDLINE]

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Show: 20	<input checked="" type="checkbox"/>	Items 1-5 of 5				One page

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PubMed	Nucleotide	Protein	Genome	Structure	PopSet	Taxonomy	OMIM	Bo
Search PubMed	<input checked="" type="checkbox"/> for (recombinational hotspot)					Go	Clear	
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Show: 20	<input checked="" type="checkbox"/> Items 1-20 of 55		Page 1 of 3		Select page: 1 2 3	

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- ☐ **1:** Pecina A, Smith KN, Mezard C, Murakami H, Ohta K, Nicolas A. [Related Articles, Links](#)  
Targeted stimulation of meiotic recombination.  
Cell. 2002 Oct 18;111(2):173-84.  
PMID: 12408862 [PubMed - in process]

PubMed Services

- ☐ **2:** He Q, Cederberg H, Rannug U. [Related Articles, Links](#)  
The influence of sequence divergence between alleles of the human MS205 minisatellite incorporated into the yeast genome on length-mutation rates and lethal recombination events during meiosis.  
J Mol Biol. 2002 May 31;319(2):315-27.  
PMID: 12051909 [PubMed - indexed for MEDLINE]

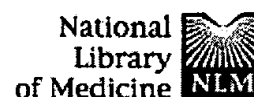
Related Resources

- ☐ **3:** Lobachev KS, Gordenin DA, Resnick MA. [Related Articles, Links](#)  
The Mre11 complex is required for repair of hairpin-capped double-strand breaks and prevention of chromosome rearrangements.  
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- ☐ **4:** Urawa H, Hidaka M, Ishiguro S, Okada K, Horiuchi T. [Related Articles, Links](#)  
Enhanced homologous recombination caused by the non-transcribed spacer of the rDNA in Arabidopsis.  
Mol Genet Genomics. 2001 Dec;266(4):546-55.  
PMID: 11810225 [PubMed - indexed for MEDLINE]

- ☐ **5:** Volodin AA, Camerini-Otero RD. [Related Articles, Links](#)  
Influence of DNA sequence on the positioning of RecA monomers in RecA-DNA cofilaments.  
J Biol Chem. 2002 Jan 11;277(2):1614-8.  
PMID: 11700314 [PubMed - indexed for MEDLINE]

- ☐ **6:** Templeton AR, Weiss KM, Nickerson DA, Boerwinkle E, Sing CF. [Related Articles, Links](#)  
Cladistic structure within the human Lipoprotein lipase gene and its implications for phenotypic association studies.  
Genetics. 2000 Nov;156(3):1259-75.  
PMID: 11063700 [PubMed - indexed for MEDLINE]



PubMed Nucleotide Protein Genome Structure PopSet Taxonomy OMIM Bo

Search PubMed ☒ for (recombinational hotspot) AND yeast

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- ☐ **1:** He Q, Cederberg H, Rannug U. [Related Articles, Links](#)
- The influence of sequence divergence between alleles of the human MS205 minisatellite incorporated into the yeast genome on length-mutation rates and lethal recombination events during meiosis.
- J Mol Biol. 2002 May 31;319(2):315-27.  
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PMID: 11810225 [PubMed - indexed for MEDLINE]

- ☐ **4:** Murray J, Buard J, Neil DL, Yeramian E, Tamaki K, Hollies C, Jeffreys AJ. [Related Articles, Links](#)
- Comparative sequence analysis of human minisatellites showing meiotic repeat instability.
- Genome Res. 1999 Feb;9(2):130-6.  
PMID: 10022977 [PubMed - indexed for MEDLINE]

- ☐ **5:** Dooner HK, Martinez-Ferez IM. [Related Articles, Links](#)
- Recombination occurs uniformly within the bronze gene, a meiotic recombination hotspot in the maize genome.
- Plant Cell. 1997 Sep;9(9):1633-46.  
PMID: 9338965 [PubMed - indexed for MEDLINE]

- ☐ **6:** Kobayashi T, Horiuchi T. [Related Articles, Links](#)
- A yeast gene product, Fob1 protein, required for both replication fork blocking and recombinational hotspot activities.
- Genes Cells. 1996 May;1(5):465-74.  
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DIALOG

Set	Items	Description
S1	413098	(RECOMBINATION OR RECOMBINATIONAL)
S2	1349	(RECOMBINATION OR RECOMBINATIONAL) (W) (HOTSPOT?)
S3	177	S2 (S) (FUNGUS OR FUNGAL OR FUNGI OR YEAST)
S4	1	S3 (S) (HAPLOID)
S5	8	S3 (S) (NEUROSPORA)
S6	0	S3 (S) (DIPLOID)
S7	8	S3 (S) COG
S8	4	RD S5 (unique items)
S9	4	RD S7 (unique items)
S10	4	S8 OR S9
?		

t s10/medium/1-4

10/3/1 (Item 1 from file: 5)  
DIALOG(R)File 5:Biosis Previews(R)  
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12121366 BIOSIS NO.: 199900416215  
Polymorphism around cog extends into adjacent structural genes.  
AUTHOR: ~~Yeadon P Jane; Catcheside David EA (a)~~  
AUTHOR ADDRESS: (a)School of Biological Sciences, Flinders University,  
Adelaide, SA, 5001\*\*Australia  
JOURNAL: ~~Current Genetics~~ 35 (6) :p631-637, July, 1999  
ISSN: 0172-8083  
DOCUMENT TYPE: Article  
RECORD TYPE: Abstract  
LANGUAGE: English  
SUMMARY LANGUAGE: English

10/3/2 (Item 1 from file: 98)  
DIALOG(R)File 98:General Sci Abs/Full-Text  
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03253312 H.W. WILSON RECORD NUMBER: BGS196003312 (USE FORMAT 7 FOR  
FULLTEXT)  
Meiotic recombination hotspots.  
Lichten, Michael  
Goldman, Alastair S. H  
Annual Review of Genetics (Annu Rev Genet) v. 29 ('95) p. 423-44  
SPECIAL FEATURES: bibl il ISSN: 0066-4197  
LANGUAGE: English  
COUNTRY OF PUBLICATION: United States  
WORD COUNT: 10773

10/3/3 (Item 1 from file: 155)  
DIALOG(R)File 155:MEDLINE(R)

13762706 22286377 PMID: 12399385  
Recombination at his-3 in Neurospora Declines Exponentially With Distance  
from the Initiator, cog.  
Yeadon P Jane; Koh L Y; Bowring E J; Rasmussen J P; Catcheside D E A  
School of Biological Sciences, Flinders University, Bedford Park 5042,  
South Australia.  
Genetics (United States) Oct 2002, 162 (2) :p747-53, ISSN 0016-6731  
Journal Code: 0374636  
Document type: Journal Article *late*  
Languages: ENGLISH  
Main Citation Owner: NLM  
Record type: In Process

10/3/4 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
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131014846 CA: 131(2)14846r PATENT  
heterologous DNA library production and diversification in fungus using  
coupled recombination hotspots  
INVENTOR(AUTHOR): Catcheside, David E.  
LOCATION: Australia  
ASSIGNEE: Flinders Technologies Pty. Ltd.  
PATENT: PCT International ; WO 9927072 A1 DATE: 19990603  
APPLICATION: WO 98AU971 (19981123) \*US 977171 (19971124)

PAGES: 103 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-001/15A;  
C12N-015/80B; C12N-003/00B; C12N-015/04B; C12N-015/11B

DESIGNATED COUNTRIES: AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN;  
CU; CZ; DE; DK; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IS; JP; KE;  
KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ;  
PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; UA; UG; US; UZ; VN;  
YU; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE  
; LS; MW; SD; SZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE;  
IT; LU; MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN;  
TD; TG

? t s10/k/1-4

>>>KWIC option is not available in file(s): 399

10/K/1 (Item 1 from file: 5)  
DIALOG(R)File 5:(c) 2002 BIOSIS. All rts. reserv.

ABSTRACT: The **recombination hotspot cog** overlaps a highly  
polymorphic 950-bp region of linkage group I in *Neurospora crassa*.  
The sequence of this region in the four strains, Lindegren 25a, Lindegren  
A, Emerson...

...more. Comparison of the sequence of St. Lawrence 74A and Lindegren 25a  
each side of **cog** shows a high level of sequence heterology  
extending in both directions, including the coding sequences for his-3  
and a putative gene lpl with homology to **yeast** lysophospholipase.  
The St. Lawrence 74A and Lindegren 25a sequences of his-3,  
centro-mere-proximal to **cog**, differ at 14 nucleotides, resulting in  
six amino-acid variations between the predicted protein sequences. In  
lpl, distal from **cog**, the sequences differ at 19 nucleotides  
leading to five amino-acid differences between the predicted proteins.  
Sequence heterology between St. Lawrence 74A and Lindegren 25a peaks  
either side of **cog** and then declines with distance. At the am locus  
on linkage group V, heterology is much less but peaks close to a weak  
**recombination hotspot** 5' of the coding sequence. Uneven  
distribution of polymorphism along chromosomes has been explained by...

10/K/2 (Item 1 from file: 98)  
DIALOG(R)File 98:(c) 2002 The HW Wilson Co. All rts. reserv.

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

... initiating lesions, either at ade6 or at other loci (3).  
HOTSPOTS IN OTHER FUNGI Meiotic **recombination hotspots**  
have been described in other fungi (reviewed in 16, 78, 87, 92, 124,  
134), including the **cog** site near his-3 in *Neurospora crassa*  
(17) and the YS17 allele of the buff locus in *Sordaria brevicollis* (75).  
Both...

...the presence of initiation hotspots in flanking regions have also been  
reported in several other fungal species (reviewed in 51, 87, 112),  
but none of the putative hotspots has been characterized...

10/K/3 (Item 1 from file: 155)  
DIALOG(R)File 155:

By deletion of 1.8 kb of sequence between **cog**(L) and his-3 and  
replacement with sequences of different lengths, we have generated a set of  
*Neurospora* strains in which the distance between **cog**(L) and the  
site at which recombination is selected varies from 1.7 to nearly 6 kb.  
Each of the manipulated strains includes **cog**(L), a highly active  
**recombination hotspot**, and rec-2, thus allowing high-frequency

recombination. In addition, each is a his-3...

... in progeny of these crosses is inversely proportional to the distance between 'his-3 and **cog**. Specifically, there is a linear relationship between  $\log(10)$  (recombination frequency) and the distance in...

... markers and the chance of co-conversion has been found in both *Drosophila* and fission **yeast**, indicating that the extension of recombination events may be a stochastic process in most organisms...

... these and additional data presented in this article, we conclude that recombination is initiated at **cog**(L) in >17% of meioses, that most conversion tracts are very short, and that few...